

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

- 1 1. (Currently Amended) An audio device for providing musical signals to a user,  
2 comprising:
  - 3 a) at least one transducer, such that said transducer enables music to be heard by said  
4 user via transcutaneous bone conduction;
  - 5 b) a means for said at least one transducer to be in vibratory contact with the head of  
6 said user; and
  - 7 c) a housing means for ~~waterproofing~~ housing said at least one transducer.
- 1 2. (Previously Presented) The audio device according to claim 1, wherein said at least one  
2 transducer includes a plurality of transducers.
- 1 3. (Currently Amended) The audio device according to claim ~~[[1]]~~ 2, wherein said plurality  
2 of transducers is arranged in an array.
- 1 4. (Previously Presented) The audio device according to claim 2, wherein the musical  
2 frequency range is split into three frequency channels.
- 1 5. (Previously Presented) The audio device according to claim 4, wherein said three  
2 frequency channels consist of:
  - 3 a) a low frequency range,
  - 4 b) a mid frequency range, and
  - 5 c) high frequency range.
- 1 6. (Previously Presented) The audio device according to claim 3, wherein at least one of  
2 said transducers in said array is an ultrasonic transducer.

- 1        7.        (Previously Presented) The audio device according to claim 3, wherein at least one of  
2                said transducers in said array is a vibrotactile transducer.
- 1        8.        (Previously Presented) The audio device according to claim 1, further including at least  
2                one amplifier.
- 1        9.        (Previously Presented) The audio device according to claim 1, wherein at least one of  
2                said transducers is positionable at the front of the head of said user.
- 1        10.       (Previously Presented) The audio device according to claim 1, wherein at least one of  
2                said transducers in said array is positionable at the back of the head of said user.
- 1        11.       (Previously Presented) The audio device according to claim 1, wherein said transducer is  
2                associated with a band that encircles the head of a user.
- 1        12.       (Previously Presented) The audio device according to claim 1, wherein said transducer is  
2                associated with a hat that is worn on the head of the said user.
- 1        13.       (Previously Presented) The audio device according to claim 1, wherein said transducer is  
2                associated with a helmet that is worn on the head of said user.
- 1        14.       (Previously Presented) The audio device according to claim 1, wherein said transducer is  
2                associated with a band of recreational eye wear selected from the group consisting of  
3                swim goggles, ski goggles, snorkel mask, and sun glasses.
- 1        15.       (Previously Presented) The audio according to claim 5, wherein said low frequency range  
2                volume is adjustable.
- 1        16.       (Previously Presented) The audio device according to claim 5, wherein said mid  
2                frequency range volume is adjustable.
- 1        17.       (Previously Presented) The audio device according to claim 5, wherein said high  
2                frequency range volume is adjustable.

- 3 18. (Previously Presented) The audio device according to claim 1, wherein said mid  
4 frequency range has a fixed maximum signal level of 90 dBa for 8 hours.
- 1 19. (Previously Presented) The audio device of claim 1, wherein said waterproof recreational  
2 audio device transmits a musical signal of a high fidelity frequency response across a  
3 broad frequency range where there is:  
4 a) a low frequency response is in the range of 40-1000 Hz;  
5 b) a mid frequency response is in the range of 250-6000 Hz; and  
6 c) a high frequency response is in the range of 5000-20,000 Hz.
- 1 20. (Previously Presented) The audio device of claim 19, wherein said at least one transducer  
2 includes an ultrasonic transducer
- 1 21. (Previously Presented) The audio device of claim 19, wherein said at least one transducer  
2 includes a vibrotactile transducer.
- 1 22. (Previously Presented) The audio device of claim 19, wherein said waterproof  
2 recreational audio device includes an adjusting capability for the mid range frequency  
3 response, such that:  
4 a) said mid frequency range volume can be adjusted to allow environmental noise to  
5 be heard by the user;  
6 b) said mid frequency range has a fixed minimum level to minimize nuisance noise  
7 for individuals near said waterproof recreational device; and  
8 c) said mid range has a fixed maximum level to restrict harmful dB noise levels for  
9 user.
- 1 23. (Previously Presented) The audio device of claim 19, wherein a volume of said low  
2 frequency range is adjustable.
- 1 24. (Previously Presented) The audio device of claim 19, wherein a volume of said mid  
2 frequency range is adjustable.

- 1 25. (Previously Presented) The audio device of claim 19, wherein a volume of said high  
2 frequency is adjustable.
  - 1 26. (Previously Presented) The audio device of claim 19, wherein said mid frequency range  
2 has a fixed maximum signal level of 90 dBa for 8 hours.
  - 1 27. (Previously Presented) The audio device of claim 1 further comprising a sound source in  
2 communication with said at least one transducer, said sound source generating a music  
3 signal which is received by said at least one transducer.
  - 1 28. (Previously Presented) The audio device of claim 27 wherein said communication  
2 between said sound source and said at least one transducer is via a wired connection.
  - 1 29. (Previously Presented) The audio device of claim 27 wherein said communication  
2 between said sound source and said at least one transducer is via a wireless connection.
  - 1 30. (Previously Presented) The audio video of claim 27 wherein said sound source is affixed  
2 to said means for said at least one transducer to be in contact with the head of said user.
  - 1 31. (Previously Presented) The audio device of claim 27 wherein said sound source is  
2 selected from the group consisting of MP3 player, tape player, radio, audio transceiver,  
3 and disc player.
  - 1 32. (Previously Presented) A recreational audio device, comprising :  
2 a) at least one transducer which enables music to be heard by a user via  
3 transcutaneous bone conduction; and  
4 b) a support which supports said at least one transducer in contact with a head of a  
5 user at a plurality of locations around the head of said user.
  - 1 33. (Original) The recreational audio device according to claim 32 wherein said at least one  
2 transducer includes a plurality of transducers.

- 1     34.     (Original) The recreational audio device according to claim 32 wherein said at least one  
2             transducer can be removed from said support and re-positioned at least one different  
3             location on said support.
- 1     35.     (Original) The recreational audio device according to claim 32 wherein said at least one  
2             transducer can slide to different locations on said support.
- 1     36.     (Original) The recreational audio device according to claim 32 wherein said support can  
2             be oriented at multiple orientations relative to a head of a user.
- 1     37.     (Original) The recreational audio device of claim 36 wherein said support is a head band.
- 1     38.     (Original) The recreational audio device of claim 32 further comprising waterproofing for  
2             said at least one transducer.
- 1     39.     (Original) The recreational audio device of claim 32 further comprising a sound source  
2             for conveying musical signals to said at least one transducer.
- 1     40.     (Previously Presented) A method for a user to listen to music via transcutaneous bone  
2             conduction, comprising the steps of:  
3             a)        supplying musical signals from a source to at least one transducer capable of  
4                   transcutaneous bone conduction;  
5             b)        contacting a user's head with said at least one transducer; and  
6             c)        transmitting by transcutaneous bone conduction said musical signal to the user.
- 1     41.     (Original) The method recited in claim 40, further comprising a step of tuning musical  
2             sound heard by a user.
- 1     42.     (Original) The method of claim 41 wherein said step of tuning comprises changing point  
2             of contact of at least one transducer on a user's head.
- 1     43.     (Original) The method of claim 42 wherein changing is accomplished by repositioning a  
2             support which supports said at least one transducer on said user's head.

- 3      44.      (Original) The method of claim 42 wherein changing is accomplished by repositioning  
4                    said at least one transducer on a support which supports said at least one transducer.
- 1      45.      (Original) The method of claim 42 wherein changing is accomplished by sliding said at  
2                    least one transducer to a different location on a support which supports said at least one  
3                    transducer.
- 1      46.      (Original) The method of claim 40 comprising adjusting volume of at least one a high,  
2                    mid, or low frequency transmitted via transcutaneous bone conduction via said at least  
3                    one transducer.
- 1      47.      (Original) The method of claim 40 further comprising limiting a mid frequency range has  
2                    a fixed maximum signal level of 90 dBa for 8 hours.